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| 10/027,465 | 12/20/2001 | Michael L. Needham | CM03848H | 1563 |

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| EXAMINER |
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ZEWDU, MELESS NMN

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| ART UNIT | PAPER NUMBER |
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2683

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,465

Applicant(s)

NEEDHAM ET AL.

Examiner

Meless N Zewdu

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 11-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the communication filed on 11/23/04.
2. Claims 8, 9, 20 are cancelled in this amendment.
3. Claims 1-7, 10-19 and 21 are pending in this action.
4. This action is final.

Specification

The amendment filed on 11/23/04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the feature, " --- group consisting of signaling in-band on the first outbound link and signaling via a paging channel", recited in claims 1 and 14 is a new matter. The specification provides for alternate use of these signaling channel; but, not simultaneous, use as suggested in the cited claims (see spec., page 7, lines 14-27).

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In this regard, “ --- group consisting of signaling in-band on the first outbound link and signaling via a paging channel” is not adequately described in the specification in a manner that supports the claimed feature. The claimed feature indicates that both of the signaling channels are to be used together or simultaneously. On the contrary, the specification provides only for alternate use of (either one of the two) the signaling channels (see spec., page 7, lines 14-27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 10, 11, 13- 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chinitz in view of Han (US 6,321,089 B1).

As per claim 1: a method for a CDMA-dispatch soft handoff comprising the steps of:

establishing a first outbound link for a dispatch call reads on '958 (see fig. 2, block 202; fig. 3, block 302; fig. 4, block 402; col. 5, lines 18-52).

transmitting the dispatch call via the first outbound link reads on '958 (see fig. 2, block 202; fig. 3, blocks 302; col. 4, lines 4-26; col. 3, lines 40-51; col. 4, lines 4-26).

establishing an inbound link with a mobile station (MS) for the dispatch call reads on '958 (see fig. 2, block 206; fig. 3, block 301; col. 1, lines 32-47; col. 3, lines 40-51; col. 5, lines 23-39; col. 5, line 66-col. 6, line 18). But, Han does not explicitly teach about a method wherein a base site is to initiate a soft handoff by determining, based on a signal quality of the inbound link, that the MS should begin a soft handoff; determining, at least one base site of a plurality of adjacent base sites for the MS to begin a soft handoff with and indicating to the MS an identity of the at least one base site and an identity of an outbound link at the at least one base site, as claimed by applicant. It is to noted that the features mentioned above are features of a base site initiated handoff. However, in a related field of endeavor, Han, teaches about a "Reverse Link Soft Handoff Method", wherein a reverse link traffic signal strength or reverse link pilot signal strength of a particular mobile station is measured at a serving base station and the result compared to a predetermined threshold, which if lower, is reported to a base station controller for facilitating a soft handoff (see col. 3, lines 6-35; col. 4, lines 21-63; claims). It is obvious that the identifications of the new traffic

channels, the new/target base site and MS are transmitted to the appropriate entity at an appropriate time for a soft handoff to take place. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Chinitz' with the reverse soft handoff techniques of Han for the advantage of improving a reverse link communication quality dropped by a shadow effect, a corner effect, or a scattering effect (see col. 2, lines 57-65).

As per claim 2: the method wherein the step of determining at least one base site comprises the step of requesting at least one base site of a plurality of adjacent base sites to determine a signal quality of the inbound link as received at each of the at least one base station reads on '089 (see col. 3, lines 6-35).

As per claim 3: the method wherein the step of requesting to determine a signal quality comprises providing the at least one base site of the plurality of adjacent base sites with the long code of the MS reads on '958 (see col. 5, lines 40-52). The PN includes the long code of a base sites and/or MSs.

As per claim 4: the method wherein the step of determining at least one base site comprises the steps of:

receiving from at least one base site of the plurality of adjacent base sites an indication of a signal quality of the inbound link reads on '089 (see col. 5, lines 6-35).

selecting an adjacent base site based on the at least one indication of a signal quality of the inbound link reads on '089 (see col. 5, lines 6-35).

As per claim 5: the method wherein the step of determining at least one base site comprises the steps of:

requesting support for a soft handoff from the adjacent base site reads on '089 (see col. 5, lines 16-17). Reporting, in the context of the prior art, is same as requesting.

receiving an indication of a second an indication of a second outbound link at the adjacent base site enabling the soft handoff reads on '089 (see col. 5, lines 18-35).

As per claim 6: the method wherein the inbound link comprises a low-rate inbound link used to communicate at least one of forward power control information and reverse power information reads on '958 (col. 5, lines 40-52; col. 6, lines 46-58).

As per claim 7: the method wherein the first outbound link comprises a full-rate CDMA outbound traffic channel reads on '958 (see abstract; col. 6, lines 18-40; claim 1).

As per claim 10: the feature of claim 10 is similar to that of claim 1, since the identities of at least one base site and an outbound link are required by the provisioning of initialization information for traffic channels. Hence, claim 10 is rejected on the same ground and motivation as claim 1.

As per claim 11: the feature of claim 11 is similar to the feature of claims 1. The identity of the MS would be required by the system of the prior art since, in CDMA reception of a signal by a targeted MS is based on the unique code of that MS. Hence, claim 11 is rejected on the same ground and motivation as claim 1.

As per claim 12: the identity of a targeted MS is required by the system since signal reception is based on a unique identification code of MSs and base sites, including PN codes. The difference feature of claim 12, which is directed to a base site transmitting to the MS a CDMA code reads on '958 (see col. 5, lines 18-52).

As per claim 13: the method wherein the step of indicating to the MS the identity of an outbound link at the at least one base site comprises transmitting to the MS a CDMA code used for an outbound link at the at least one base site reads on '958 (see col. 5, lines 18-52).

As per claim 14: a base site comprising:

a receiver reads on '958 (see fig. 1, elements 112 and 113; fig. 5; col. 4, lines 57-60).

a transmitter reads on '958 (see fig. 1, elements 112 and 113; fig. 5; col. 4, lines 57-60).

a controller, coupled to the receiver and the transmitter (see fig. 1, element 111; col. 4, lines 57-60).

adapted to establish a first outbound link for a dispatch, adapted to instruct the transmitter to transmit the dispatch call via the first outbound link reads on '958 (see fig. 2, block 202; fig. 3, blocks 302; col. 3, lines 40-51; col. 4, lines 4-26).

adapted to establish an inbound link with a mobile station (MS) for the dispatch call using the receiver reads on '958 (see fig. 2, block 206; fig. 3, block 301; col. 1, lines 32-47; col. 3, lines 40-51; col. 5, lines 23-39; col. 5, line 66-col. 6, line 18). But, Han does not explicitly teach about a method wherein a base site is adapted to determine, based on a signal quality of the inbound link, that the MS should begin a soft handoff; adapted to determine at least one base site of a plurality of adjacent base sites for the MS to begin handoff with, and adapted to indicate to the MS using the transmitter an identity of the at least one base site and an identity of an outbound link at the at least

one base site, as claimed by applicant. However, in a related field of endeavor, Han, teaches about a "Reverse Link Soft Handoff Method", wherein a reverse link traffic signal strength or reverse link pilot signal strength of a particular mobile station is measured/determined at a serving base station and the result compared to a predetermined threshold, which if lower, is reported to a base station controller for facilitating a soft handoff (see col. 3, lines 6-35; col. 4, lines 21-63; claims). It is obvious that the identifications of the new traffic channels, the new/target base site and MS are transmitted to the appropriate entity at an appropriate time for a soft handoff to take place. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Chinitz' with the reverse soft handoff techniques of Han for the advantage of improving a reverse link communication quality dropped by a shadow effect, a corner effect, or a scattering effect (see col. 2, lines 57-65).

As per claim 15: the feature of claim 15 is similar to the feature of claim 2. Hence, claim 15 is rejected on the same ground and motivation as claim 2.

As per claim 16: the feature of claim 16 similar to the feature of claim 4. Hence, claim 16 is rejected on the same ground and motivation as claim 4.

As per claim 17: the feature of claim 17 is similar to the feature of claim 5. Hence, claim 17 is rejected on the same ground and motivation as claim 5.

As per claim 18: the base site wherein the inbound link comprises a low-rate inbound link used to communicate at least one of forward power control information and reverse power information reads on '958 (see col. 4, lines 3-26; col. 5, lines 18-39).

As per claim 19: the base station wherein the first outbound link comprises a full-rate outbound traffic channel reads on reads on '958 (see col. 6, lines 37-45).

As per claim 21: the feature of claim 21 is similar to the feature of claim 10. Hence, claim 21 is rejected on the same ground and motivation as claim 10.

Response to Arguments

Applicant's arguments filed 11/23/04 have been fully considered but they are not persuasive. The argument is not persuasive since it is based the claims as amended and the amended claims (1 and 14) happen to include a new matter incorporated therein, as pointed out in the 112 rejection above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Meless Zewdu
Examiner

M. Z.


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

28 March 2005.